

Fig. 1

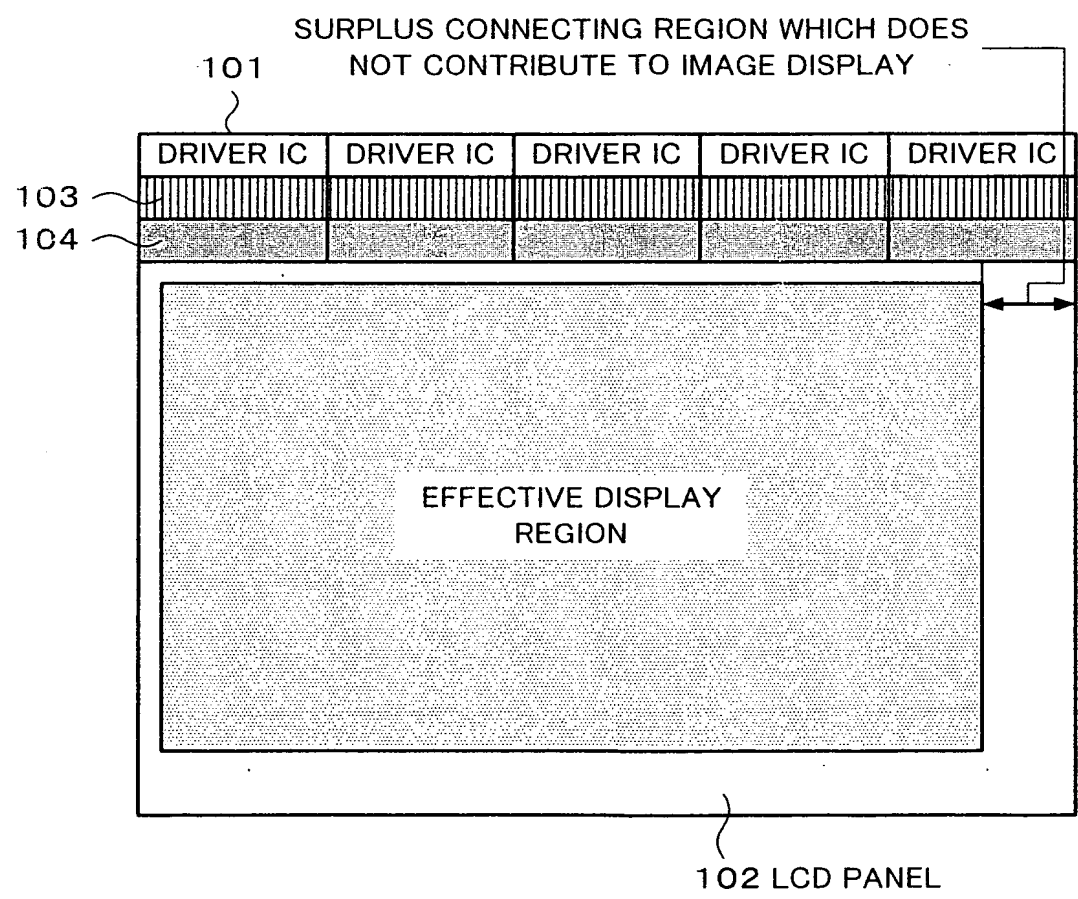


Fig. 2

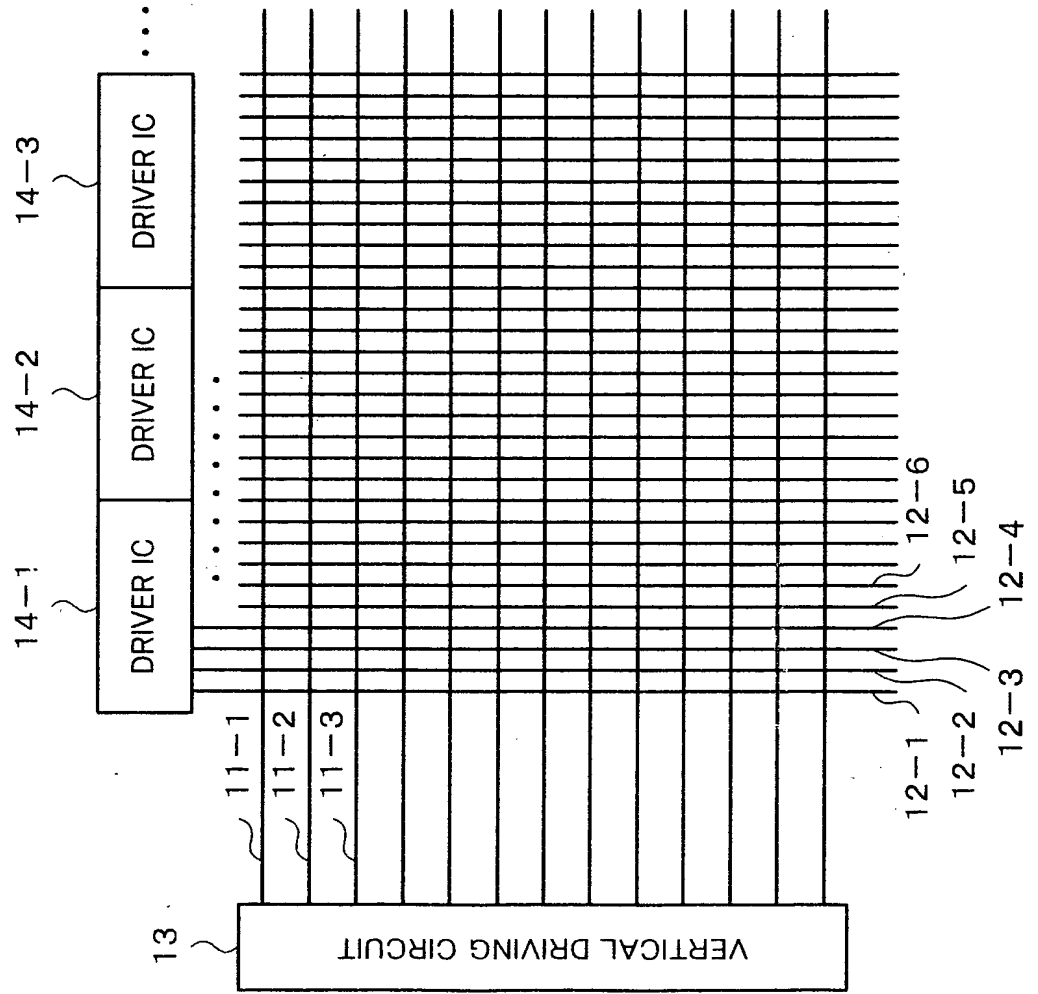


Fig. 3

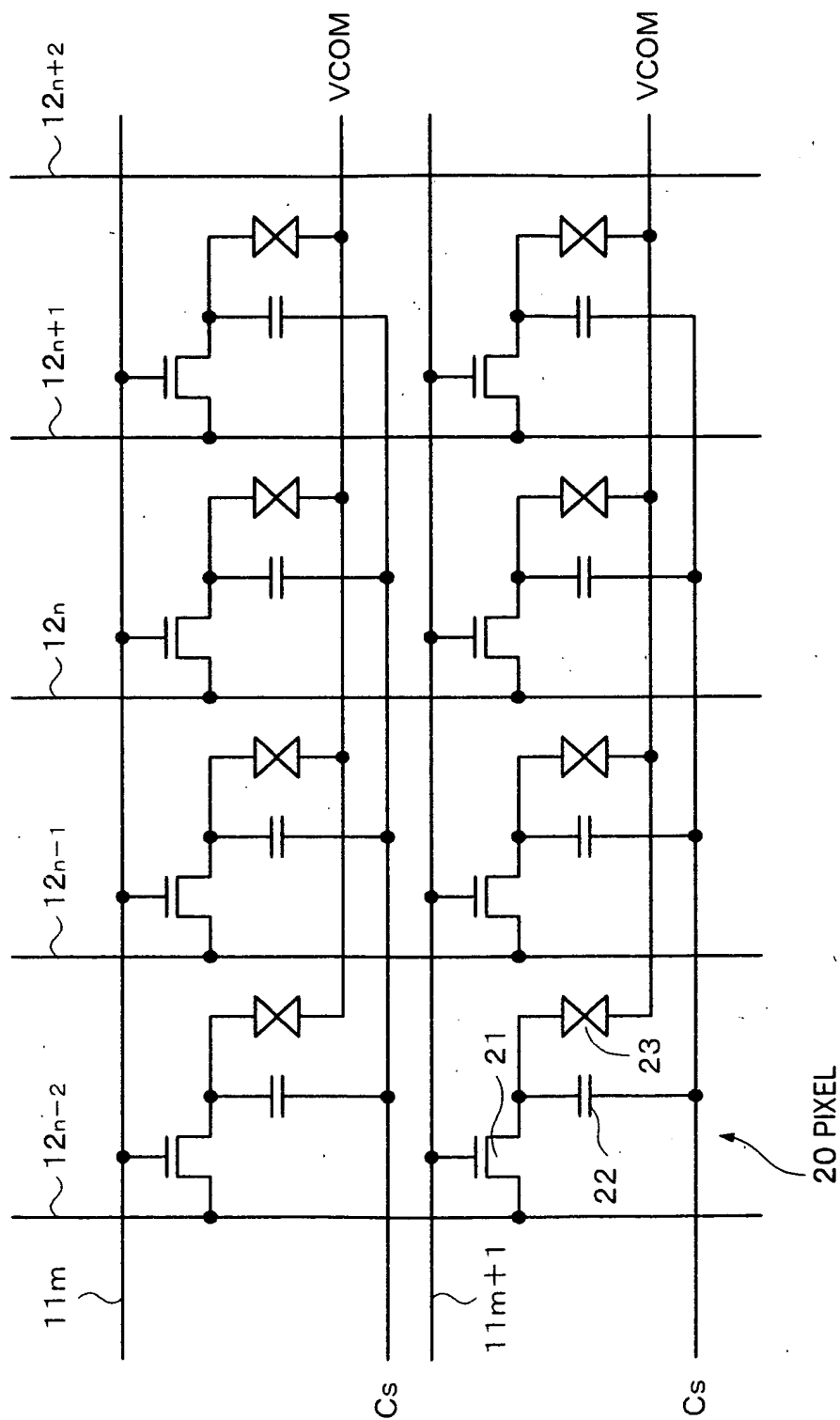


Fig. 4

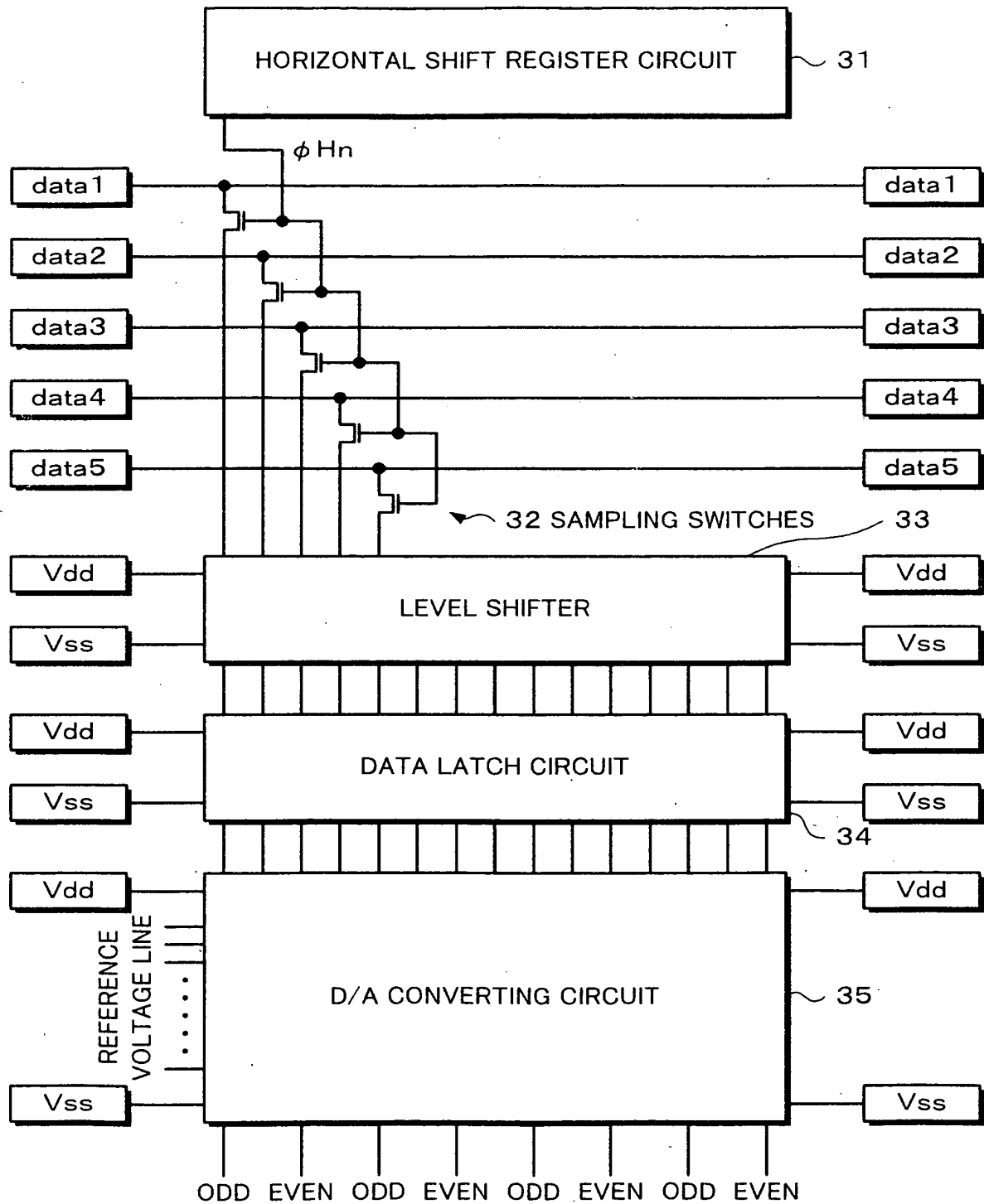


Fig. 6

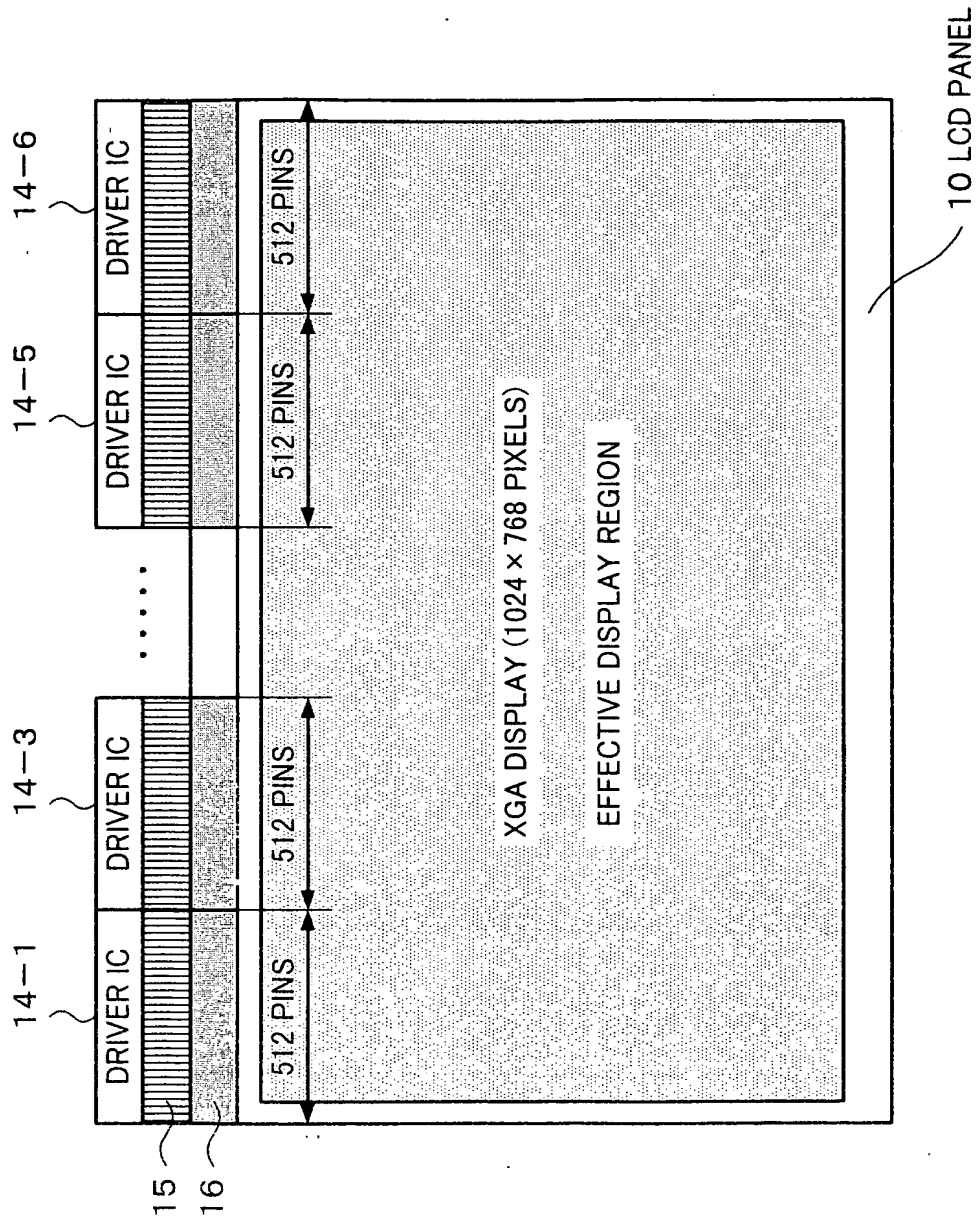


Fig. 7

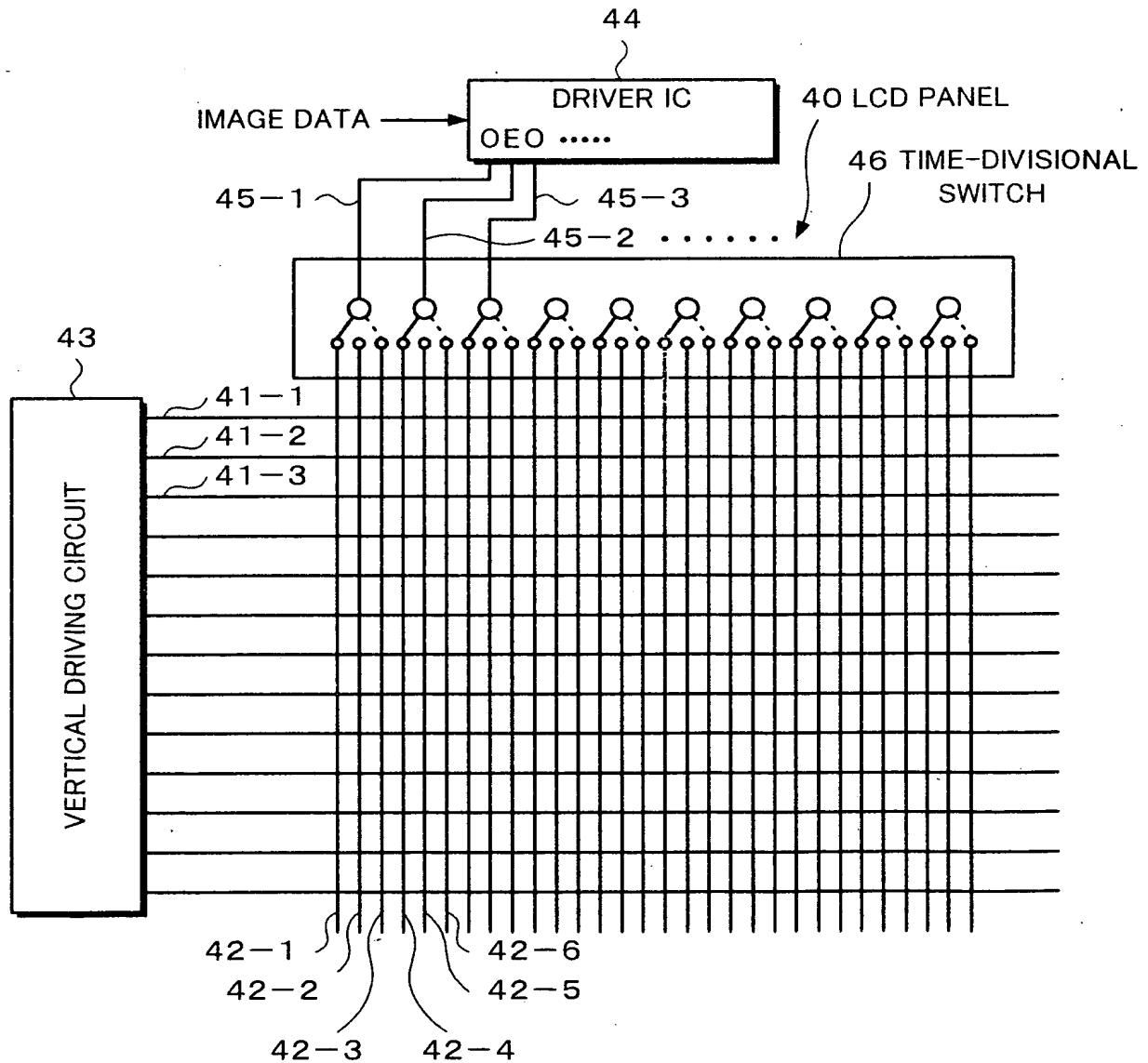


Fig. 8

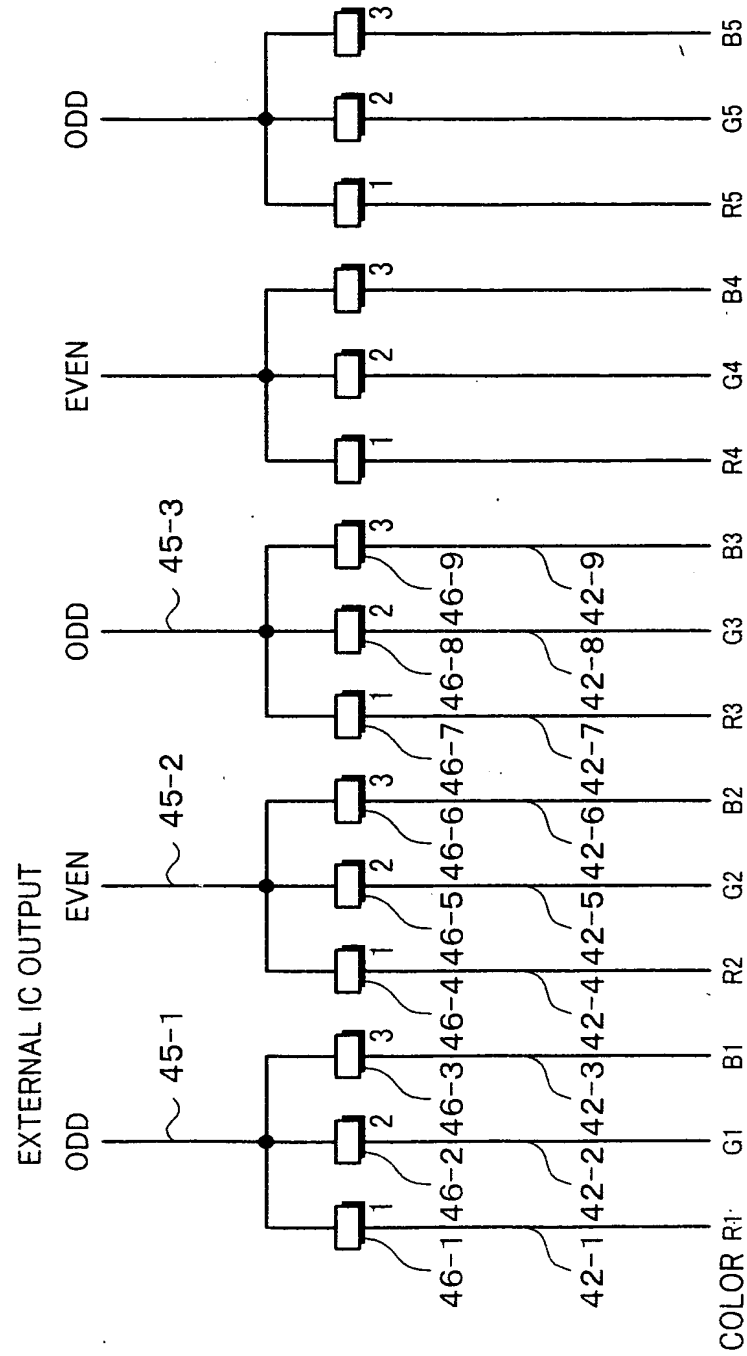


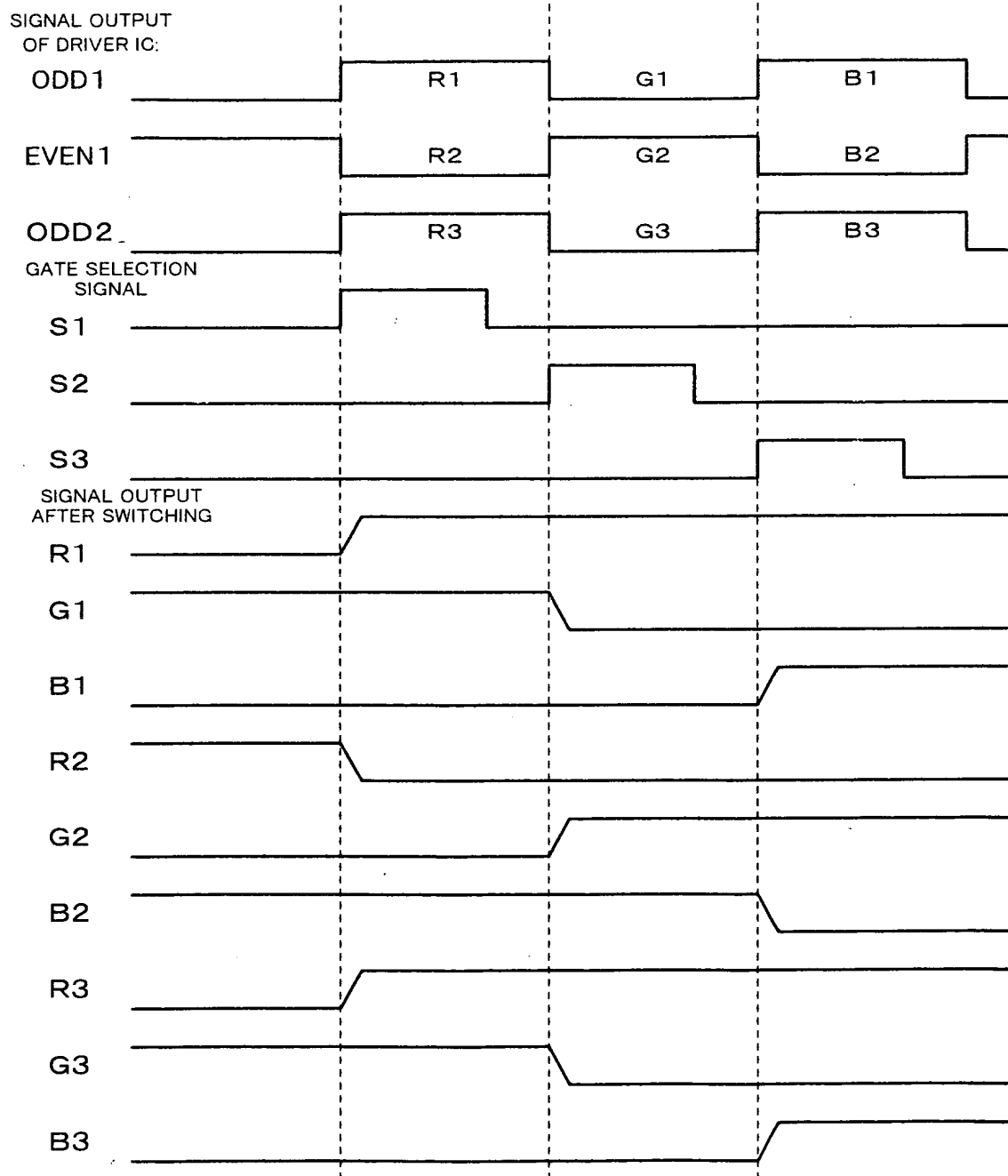
Fig. 9

Fig. 10

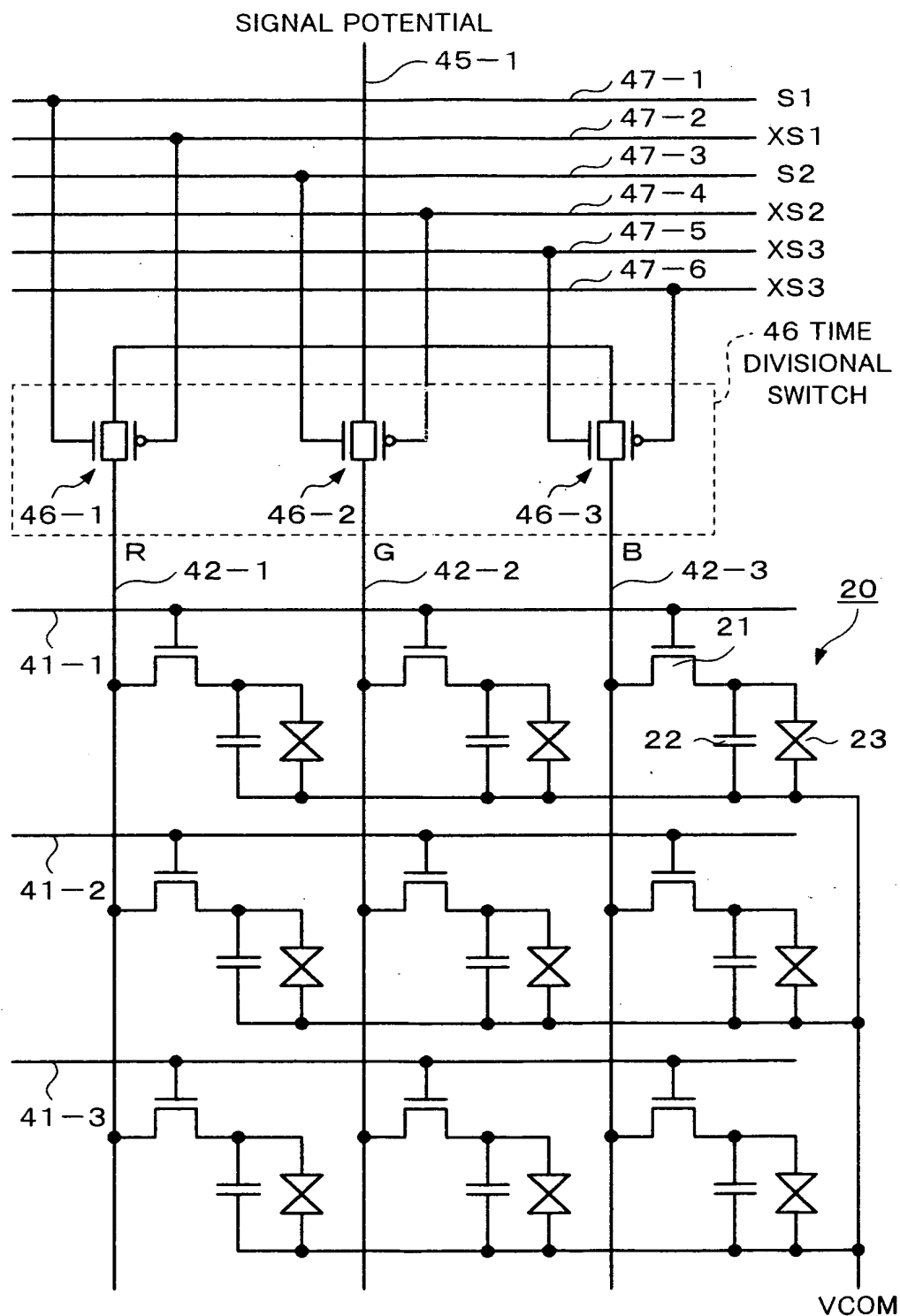
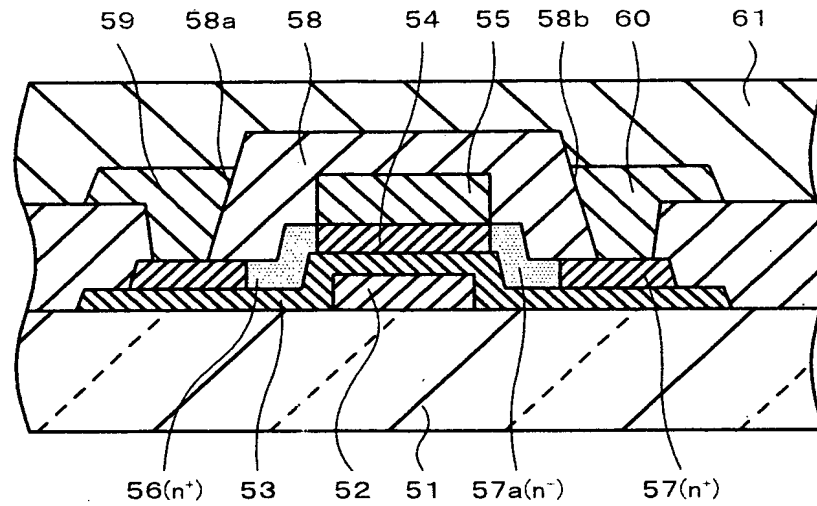
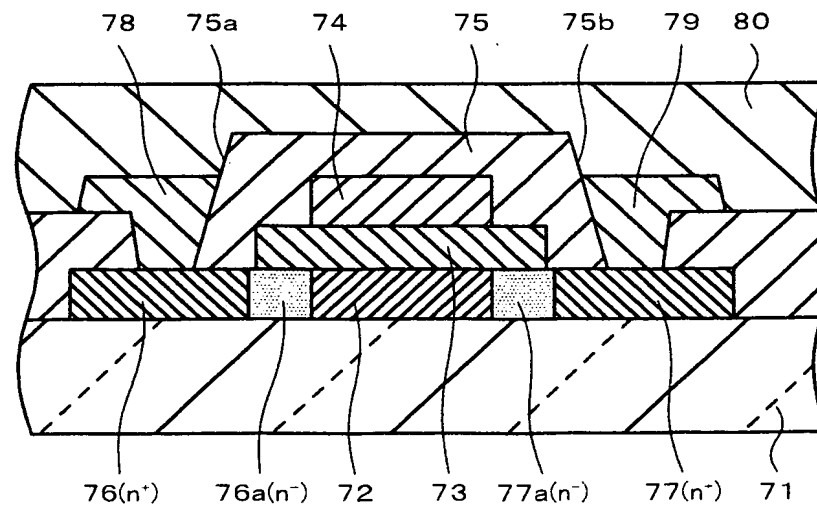


Fig. 11A*Fig. 11B*

SCANNING ORDER

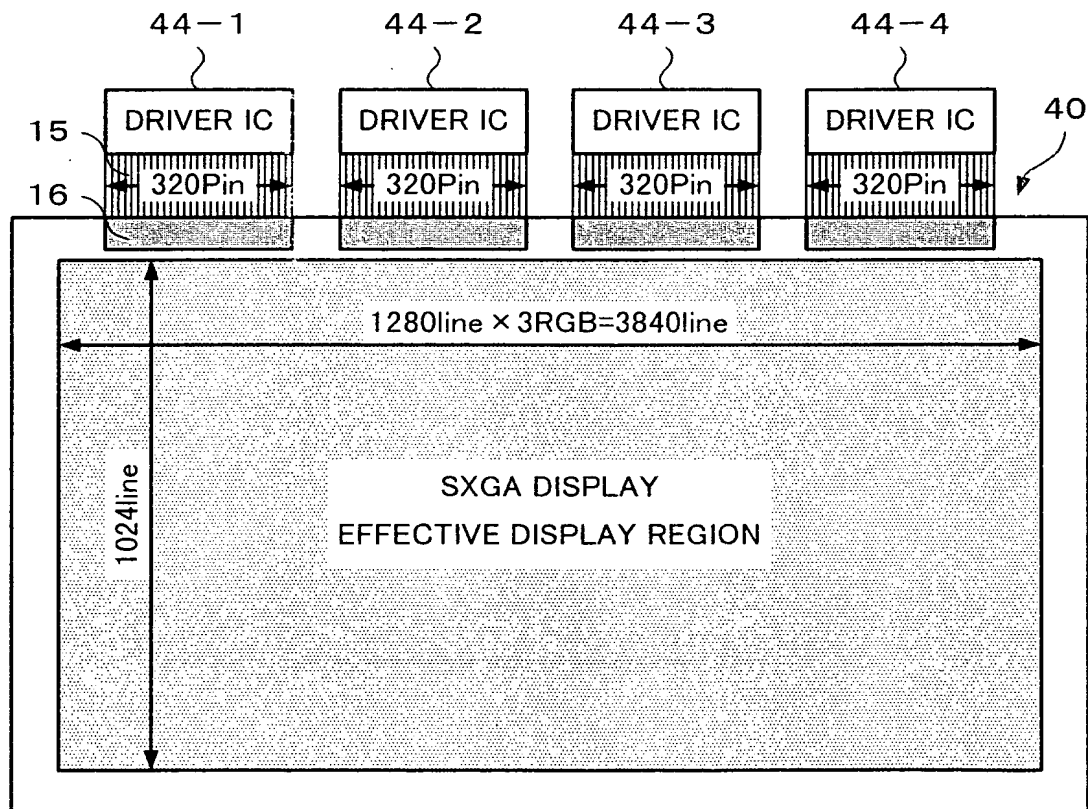
Fig. 14

Fig. 15

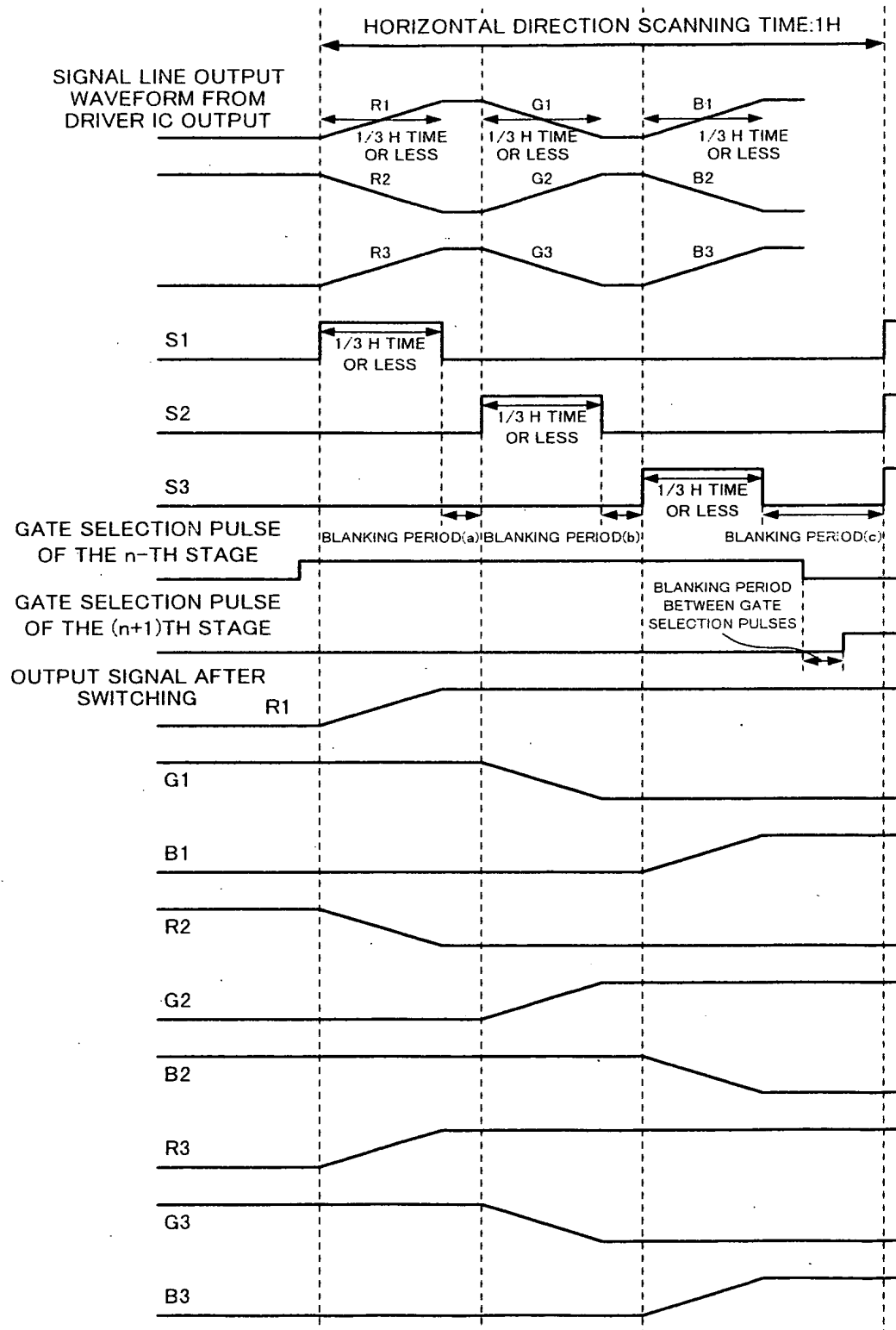


Fig. 16A

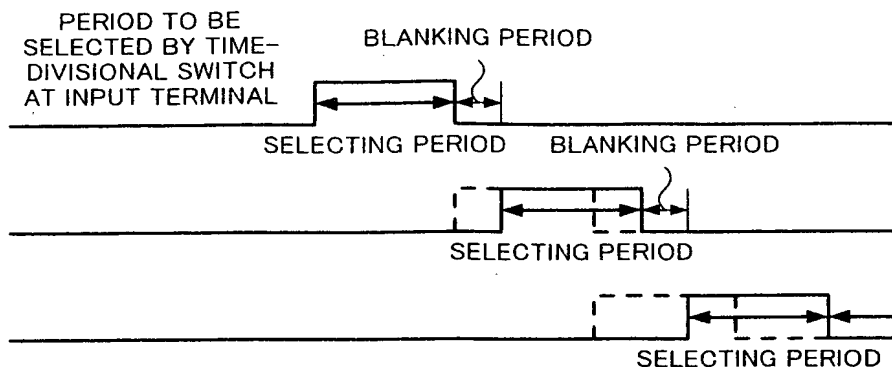


Fig. 16B

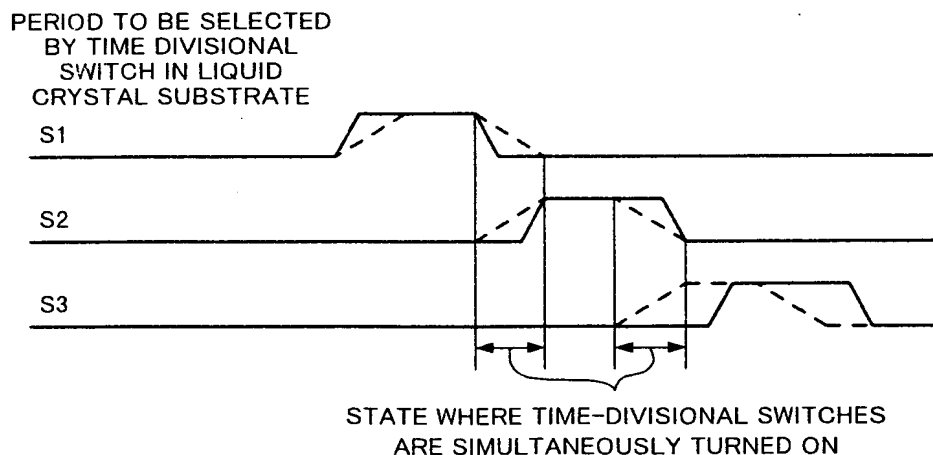


Fig. 16C

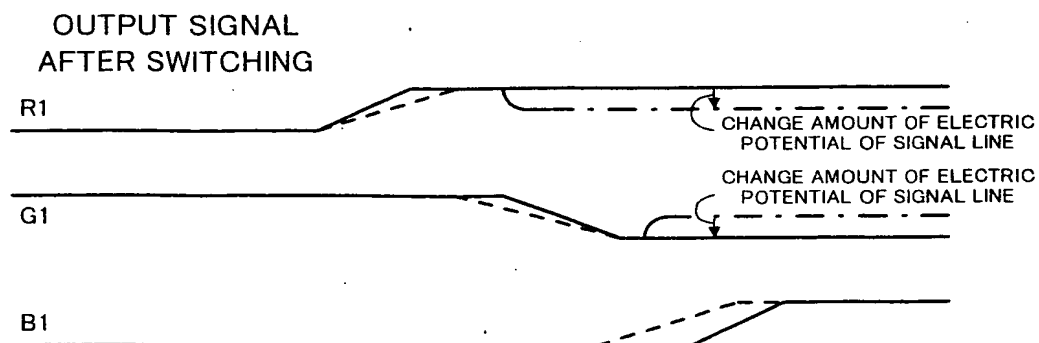


Fig. 17

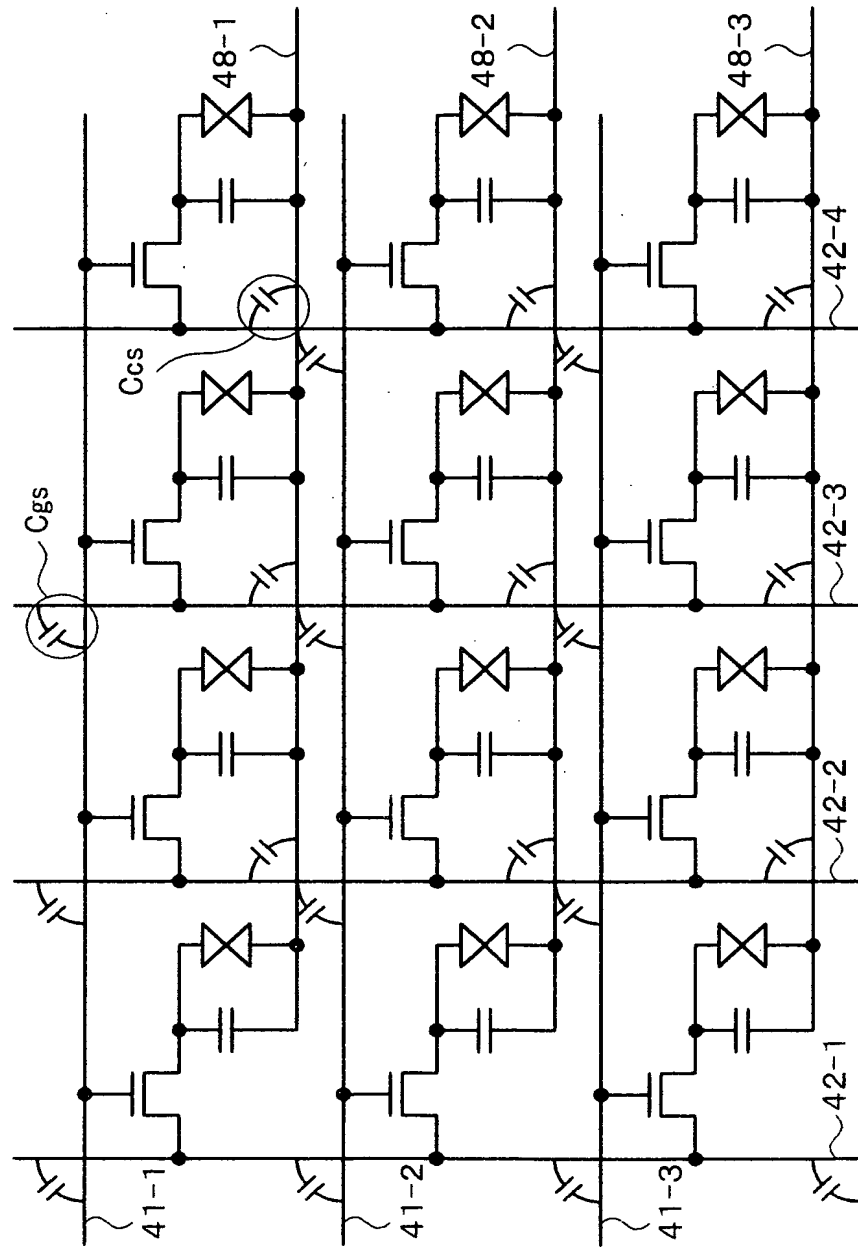


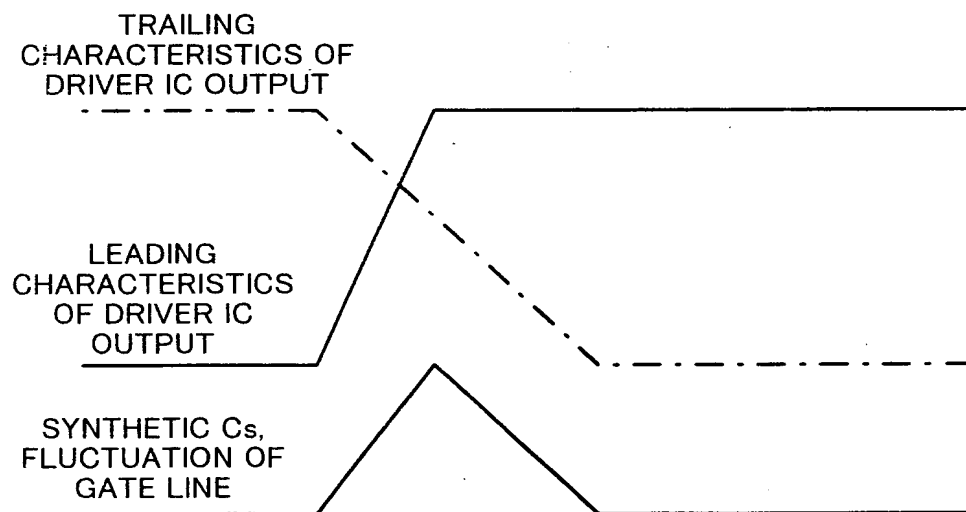
Fig. 18

Fig. 19

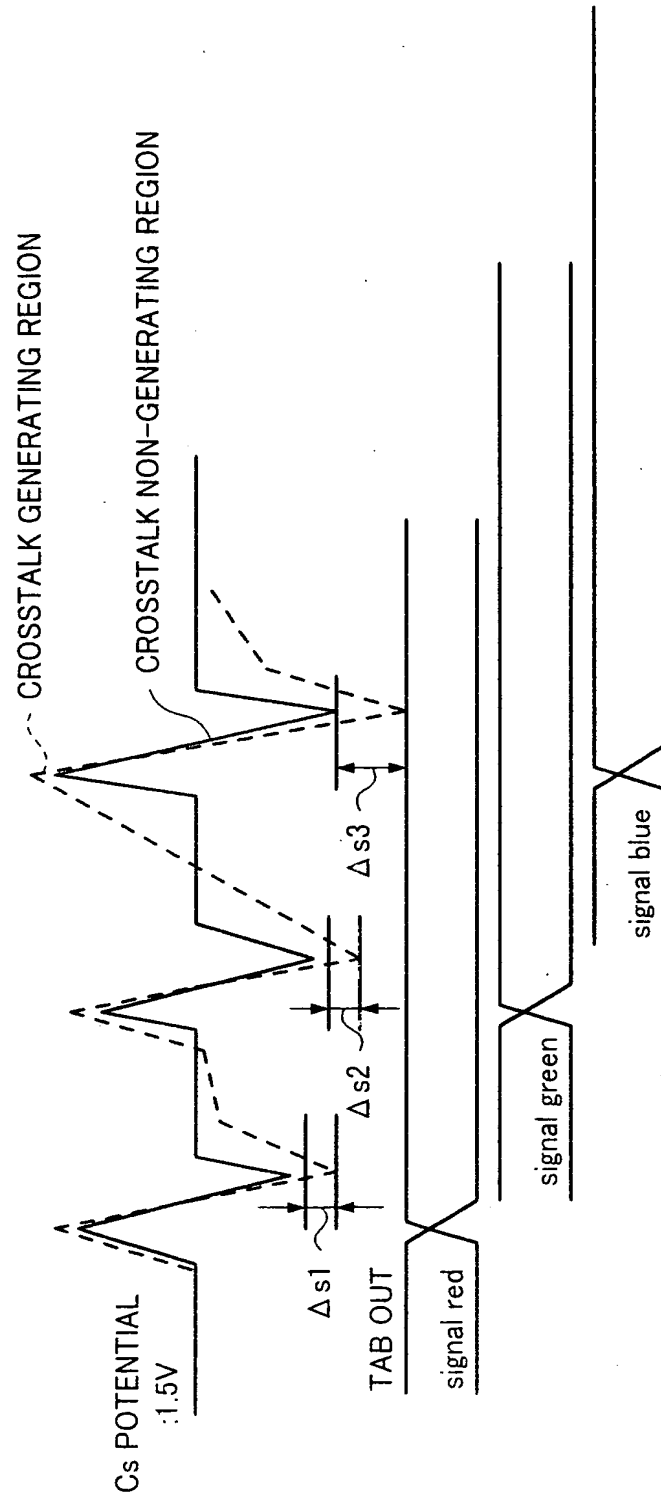


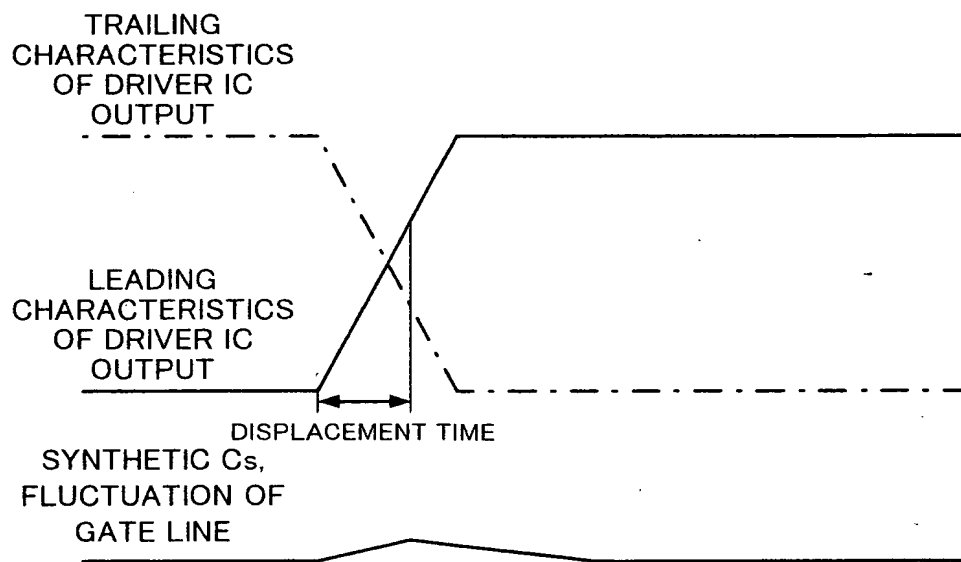
Fig. 20

Fig. 21

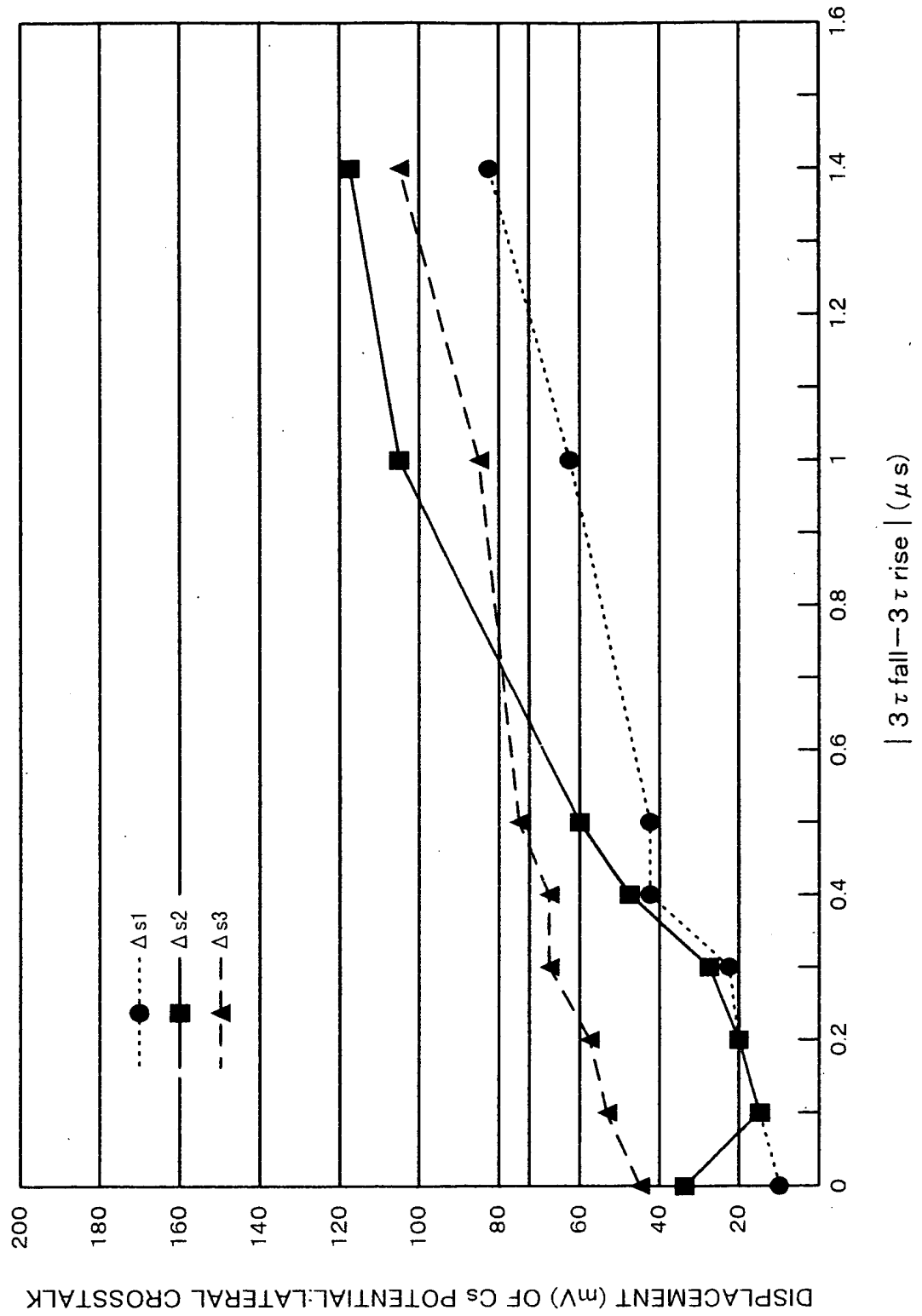


Fig. 22

HORIZONTAL SCANNING TIME	21.537 μ s	15.63 μ s	12.504 μ s	10.971 μ s
TIME TO BE SELECTED BY TIME-DIVISIONAL SWITCH	3 μ s	3 μ s	3 μ s	2 μ s
THROUGH RATE BY EXTERNAL IC	2 μ s	2 μ s	2 μ s	1.5 μ s
BLANKING PERIOD	2 μ s	1 μ s	1 μ s	1 μ s
INVERSION DISPLAY METHOD	DOT INVERSION	DOT INVERSION	DOT INVERSION	DOT INVERSION
DOT FREQUENCY	78.75MHz	108MHz	135MHz	157.5MHz

Fig. 23

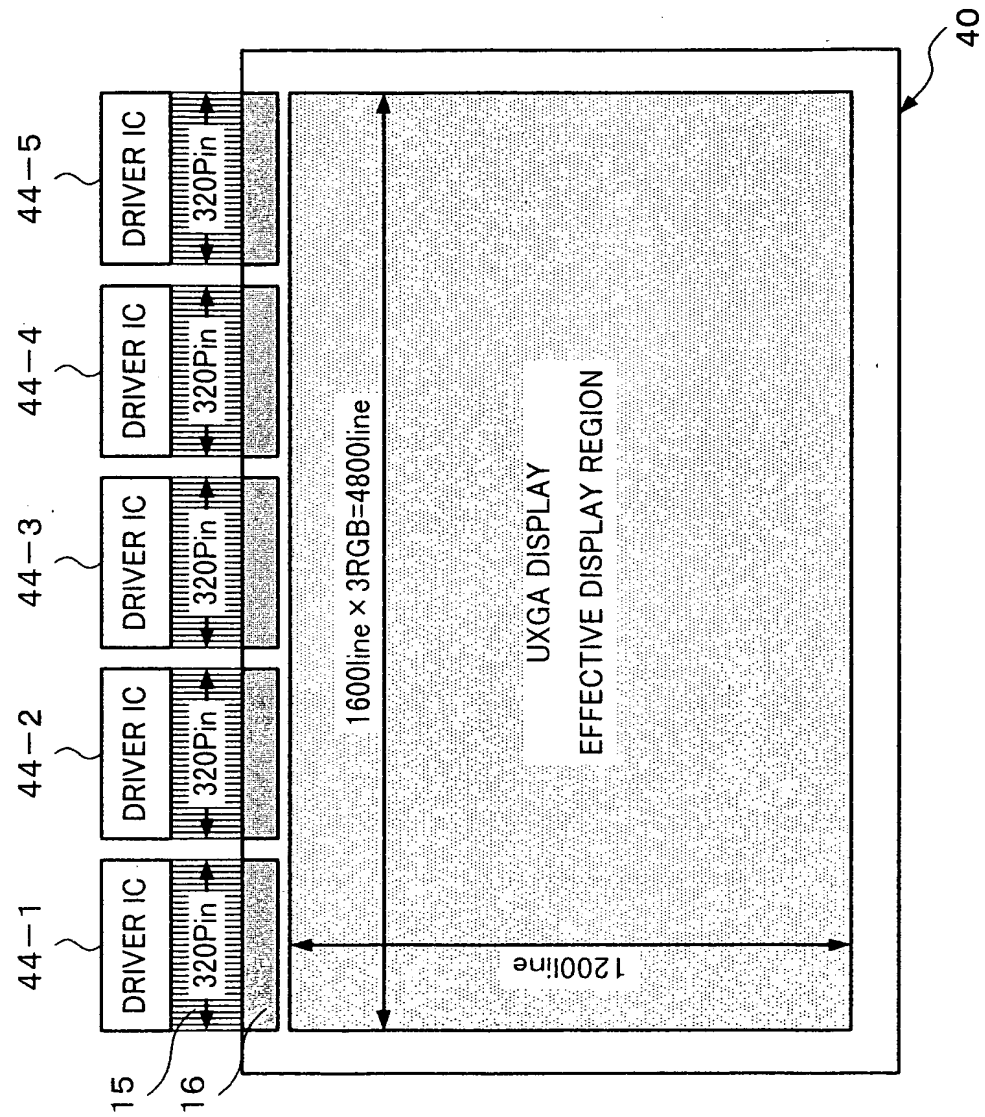


Fig. 24

HORIZONTAL SCANNING TIME	16 μs	13.333 μs	12.308 μs	11.429 μs	10.667 μs	10 μs	9.412 μs
TIME TO BE SELECTED BY TIME-DIVISIONAL SWITCH	3 μs	3 μs	3 μs	2.5 μs	2 μs	2 μs	2 μs
THROUGH RATE BY EXTERNAL IC	2 μs	2 μs	2 μs	2 μs	1.5 μs	1.5 μs	1.5 μs
BLANKING PERIOD	1 μs	1 μs	1 μs	1 μs	1 μs	1 μs	1 μs
INVERSION DISPLAY METHOD	DOT INVERSION	DOT INVERSION	DOT INVERSION	DOT INVERSION	DOT INVERSION	DOT INVERSION	DOT INVERSION
DOT FREQUENCY	135MHz	162MHz	175.5MHz	189MHz	202.5MHz	216MHz	229.5MHz

Fig. 25

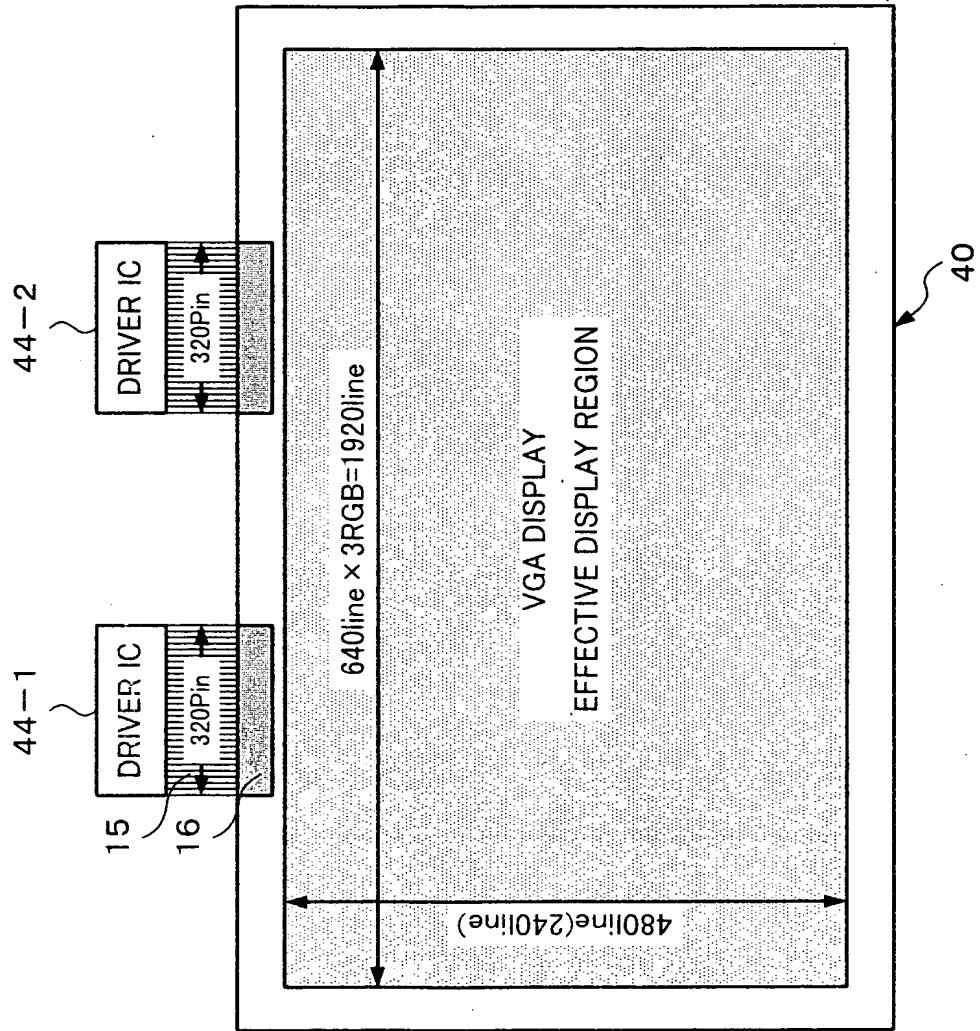


Fig. 26

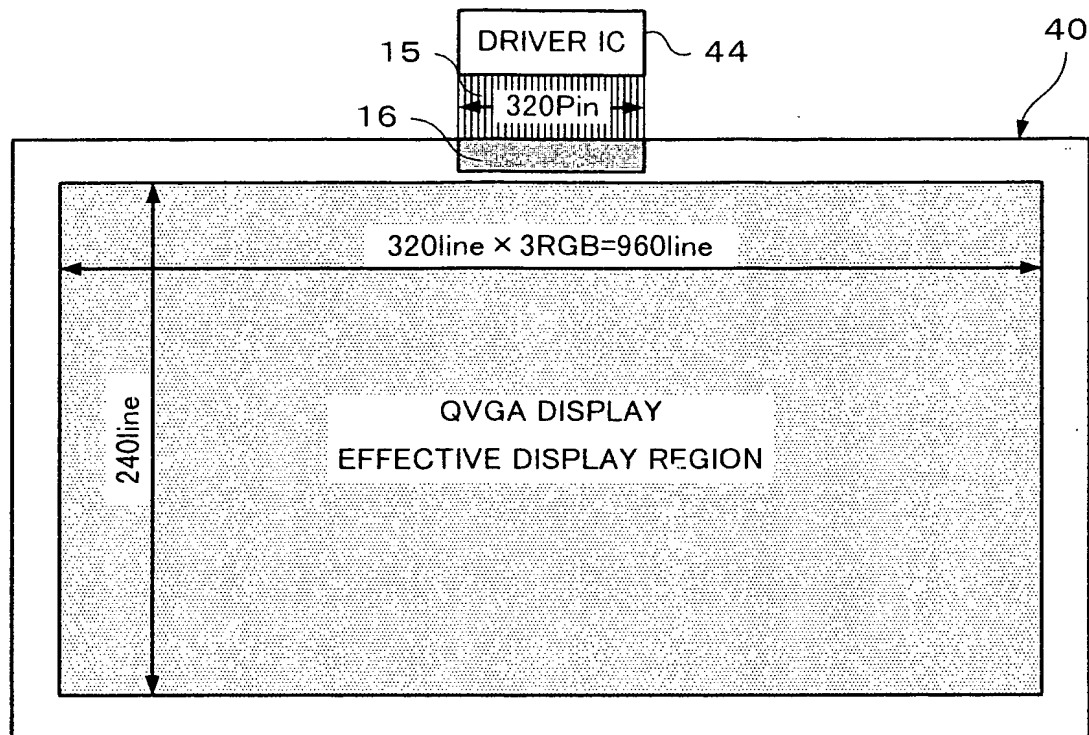


Fig. 27

	VGA	QVGA(1)	QVGA(2)
THE NUMBER OF PIXELS	HORIZONTAL: 640 × 3RGB VERTICAL: 480	HORIZONTAL: 320 × 3RGB VERTICAL: 240	HORIZONTAL: 320 × 3RGB VERTICAL: 240
HORIZONTAL SCANNING TIME	31.778 μs	63.492 μs	70.667 μs
TIME TO BE SELECTED BY TIME-DIVISIONAL SWITCH	6.774 μs	14.6 μs	10.0 μs
THROUGH RATE BY EXTERNAL IC	3 μs	3 μs	3 μs
BLANKING PERIOD	PERIOD(a),(b): 1.7 μs PERIOD(c): 8.056 μs	PERIOD(a),(b): 3 μs PERIOD(c): 13.692 μs	PERIOD(a),(b): 7 μs PERIOD(c): 26.667 μs
INVERSION DISPLAY METHOD	1H VCOM INVERSION	1H VCOM INVERSION	1H VCOM INVERSION

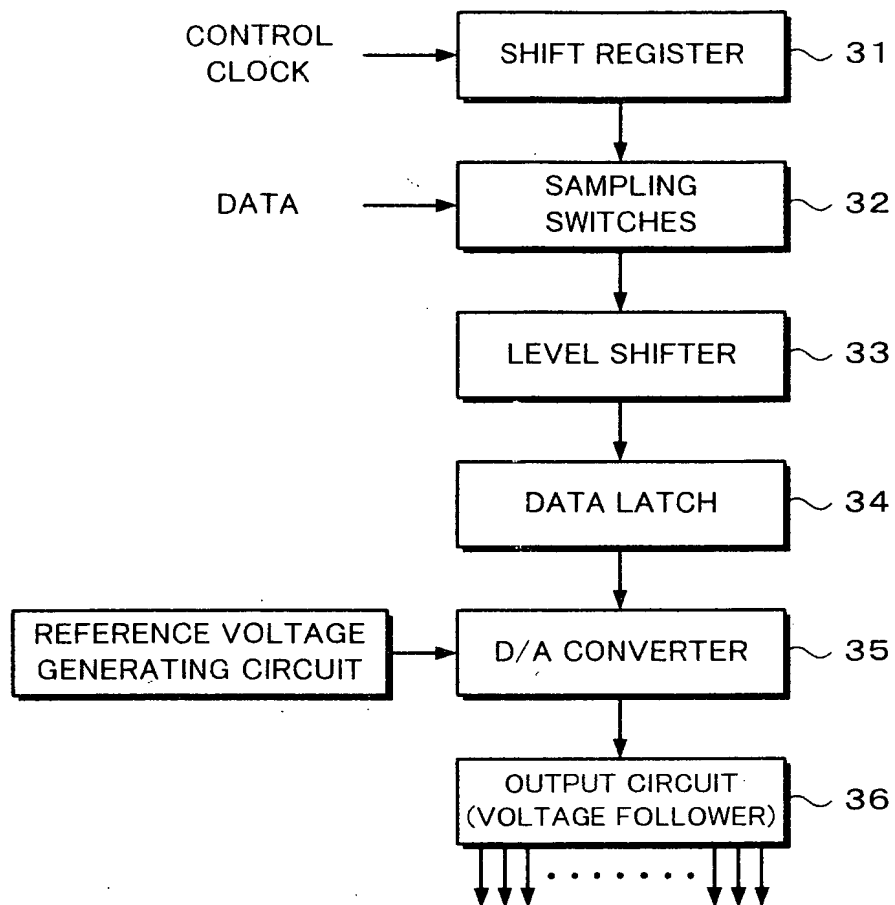
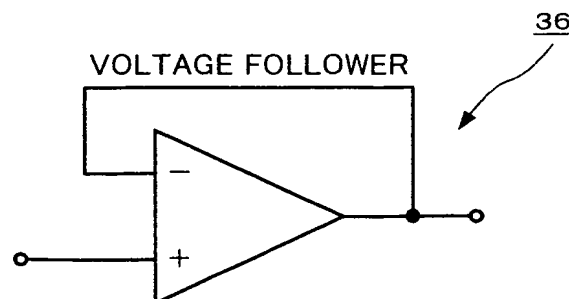
Fig. 28*Fig. 29*

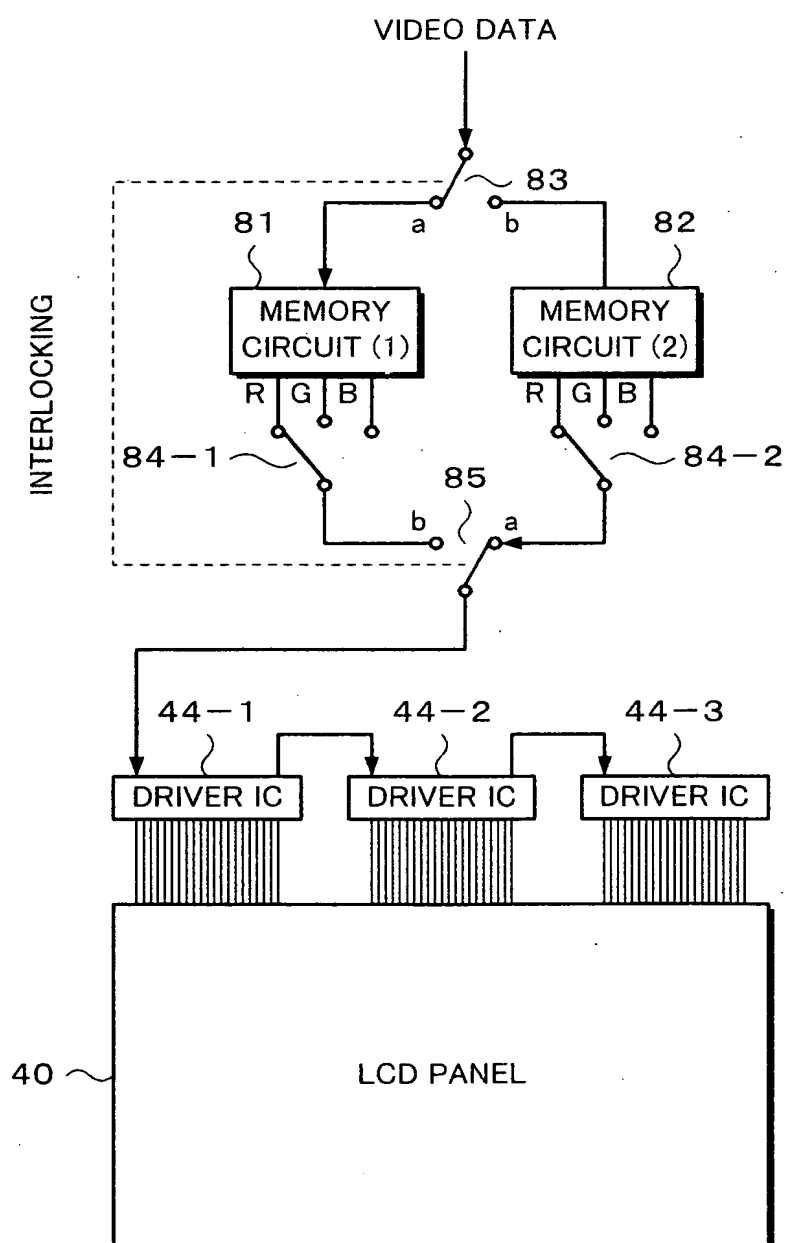
Fig. 30

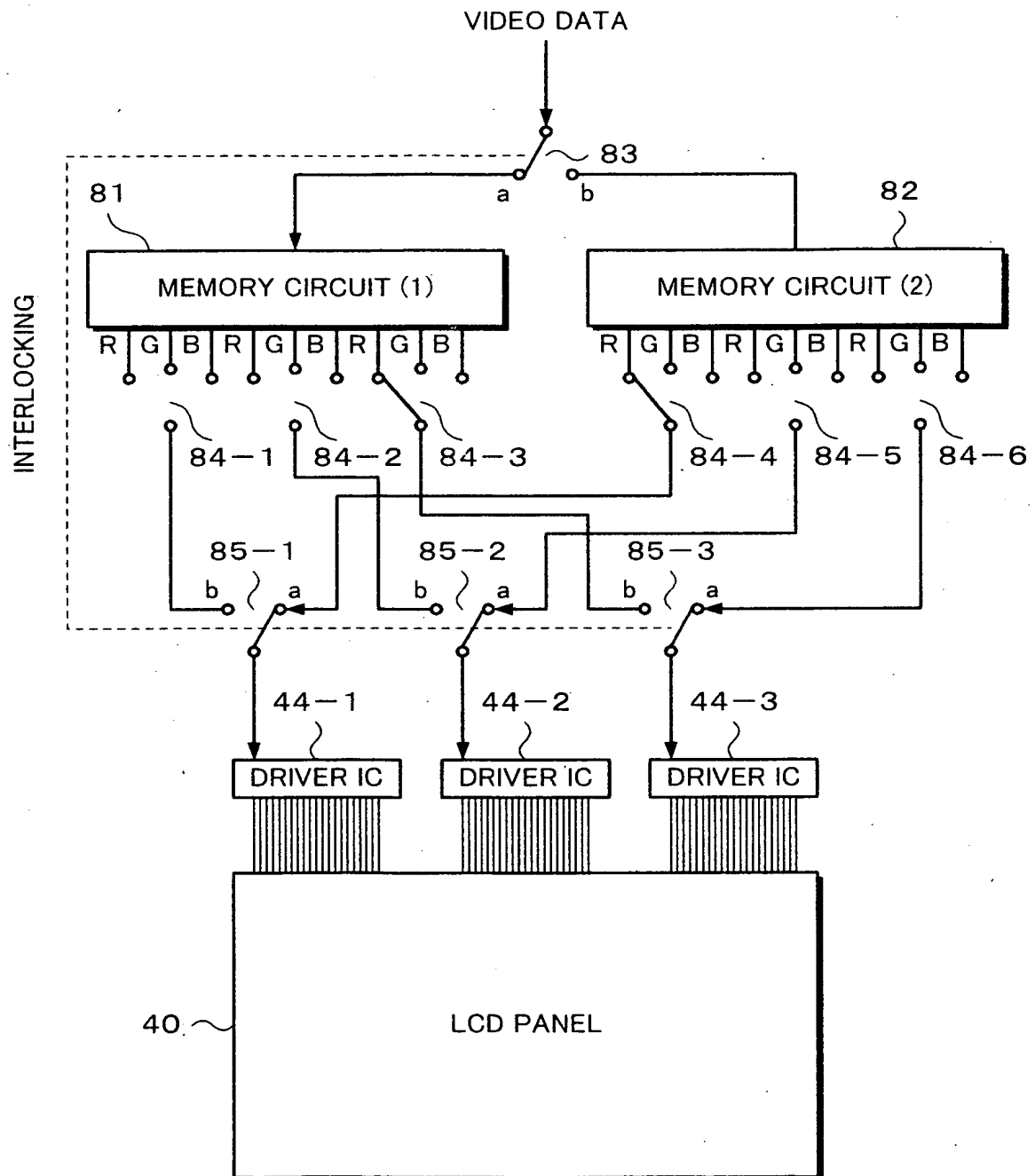
Fig. 31

Fig. 32A

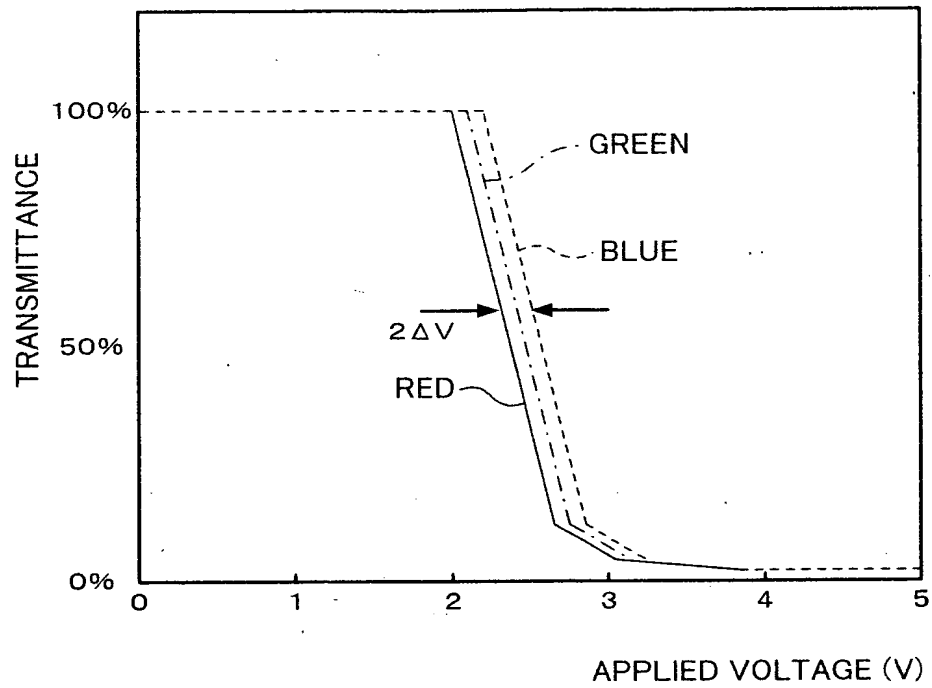


Fig. 32B

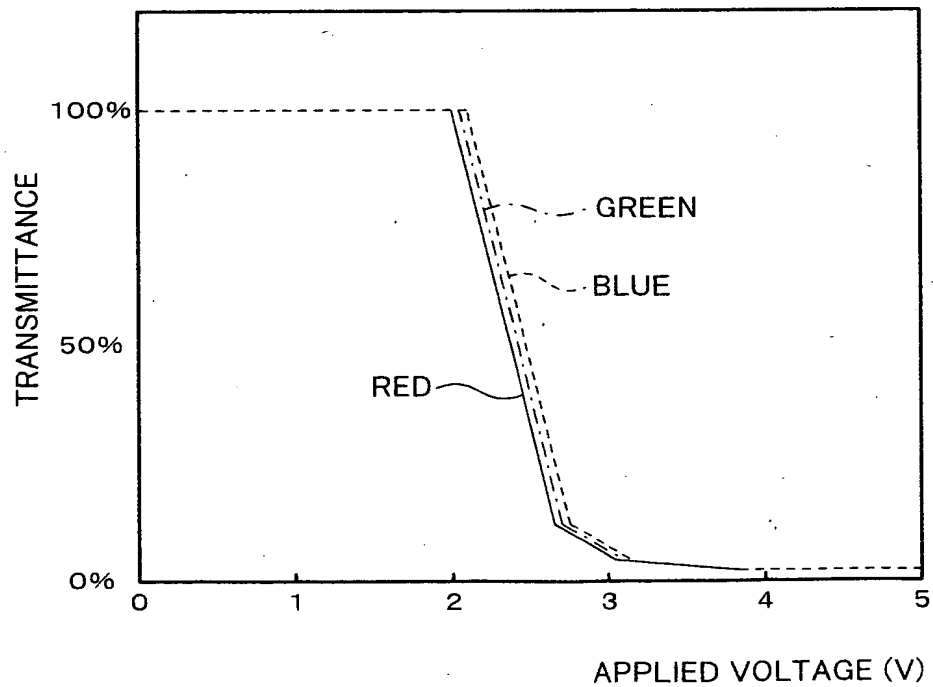


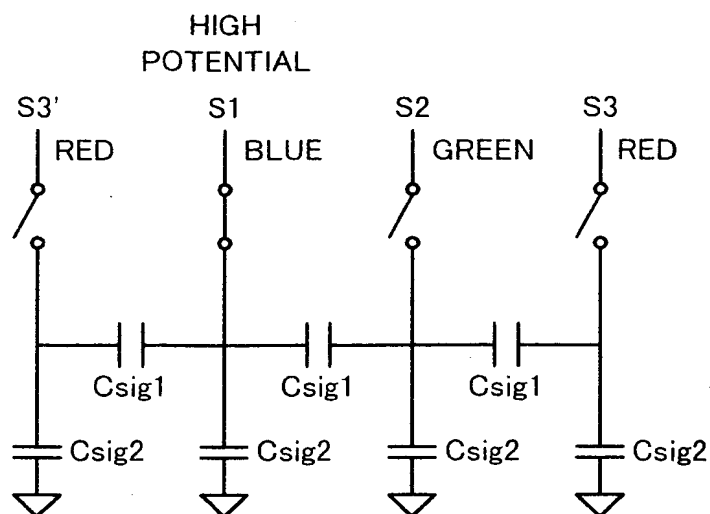
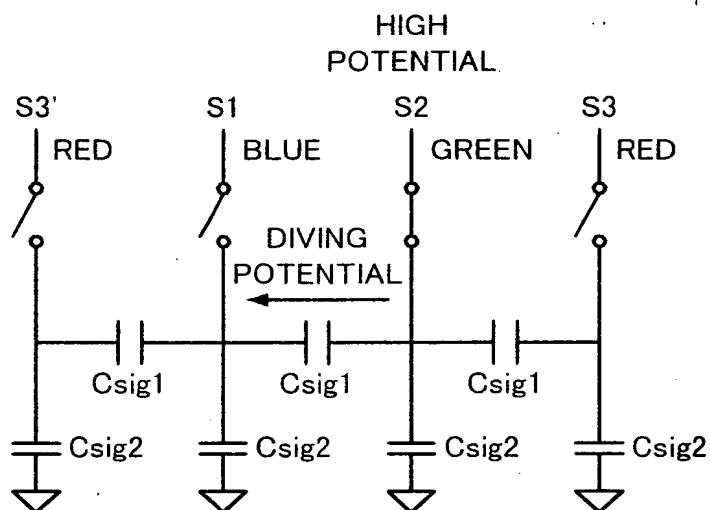
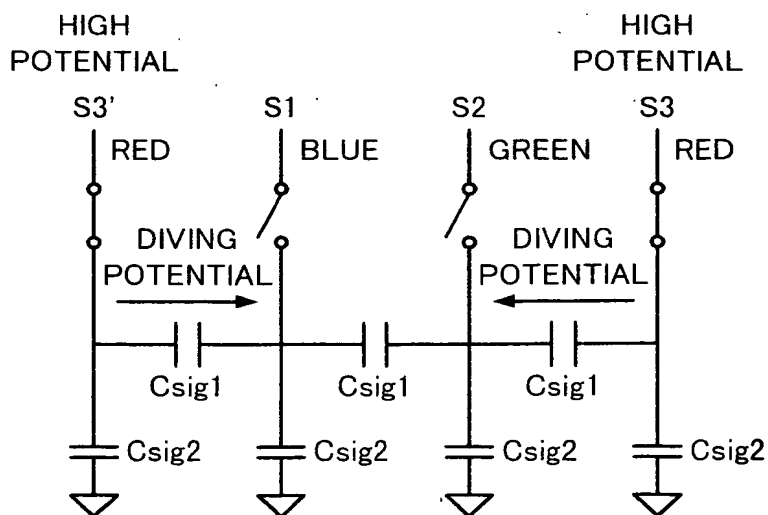
Fig. 33A*Fig. 33B**Fig. 33C*

Fig. 34

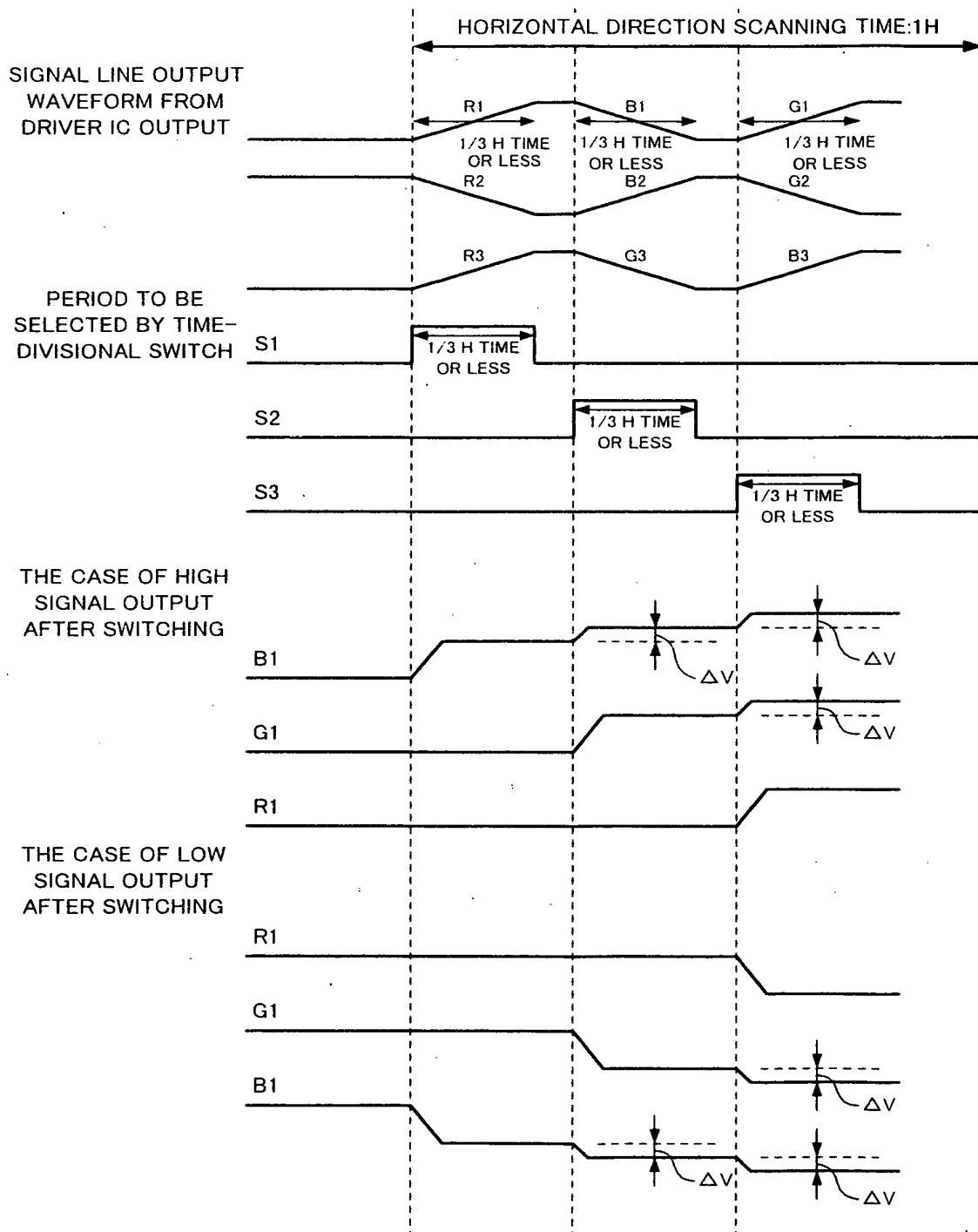


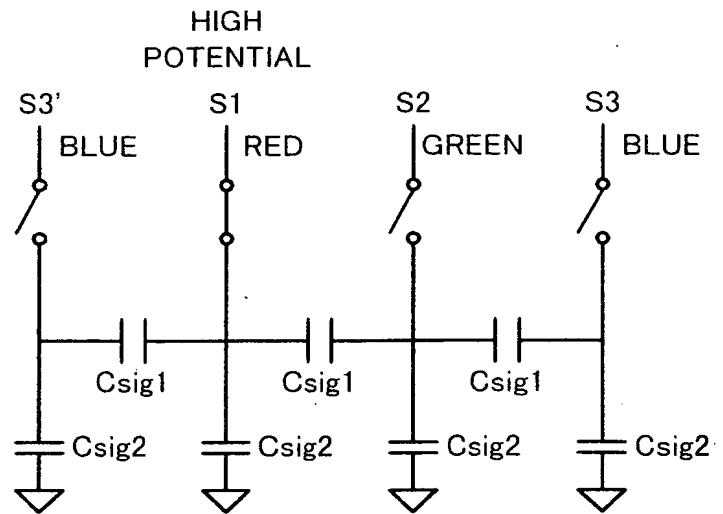
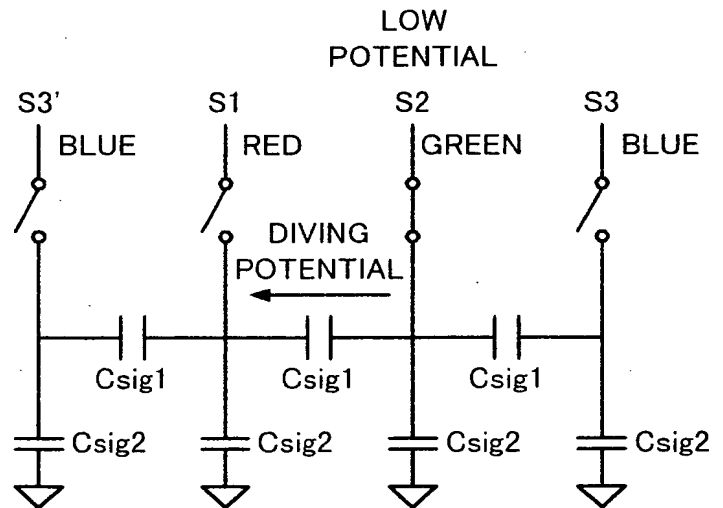
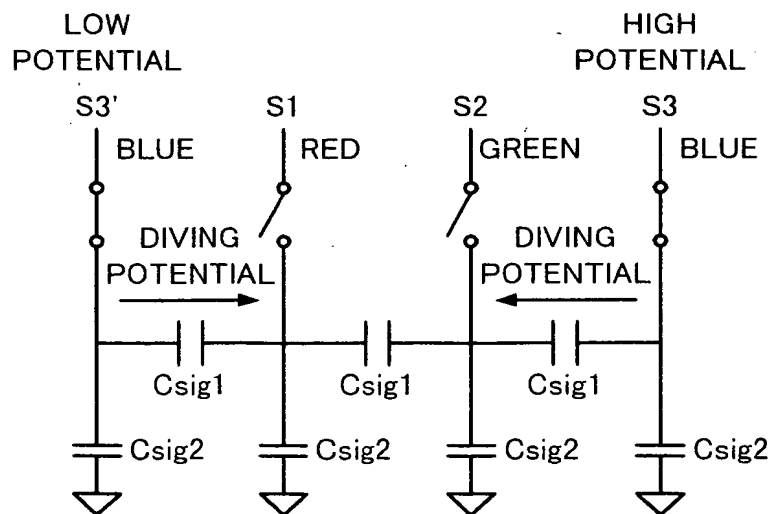
Fig. 35A*Fig. 35B**Fig. 35C*

Fig. 36

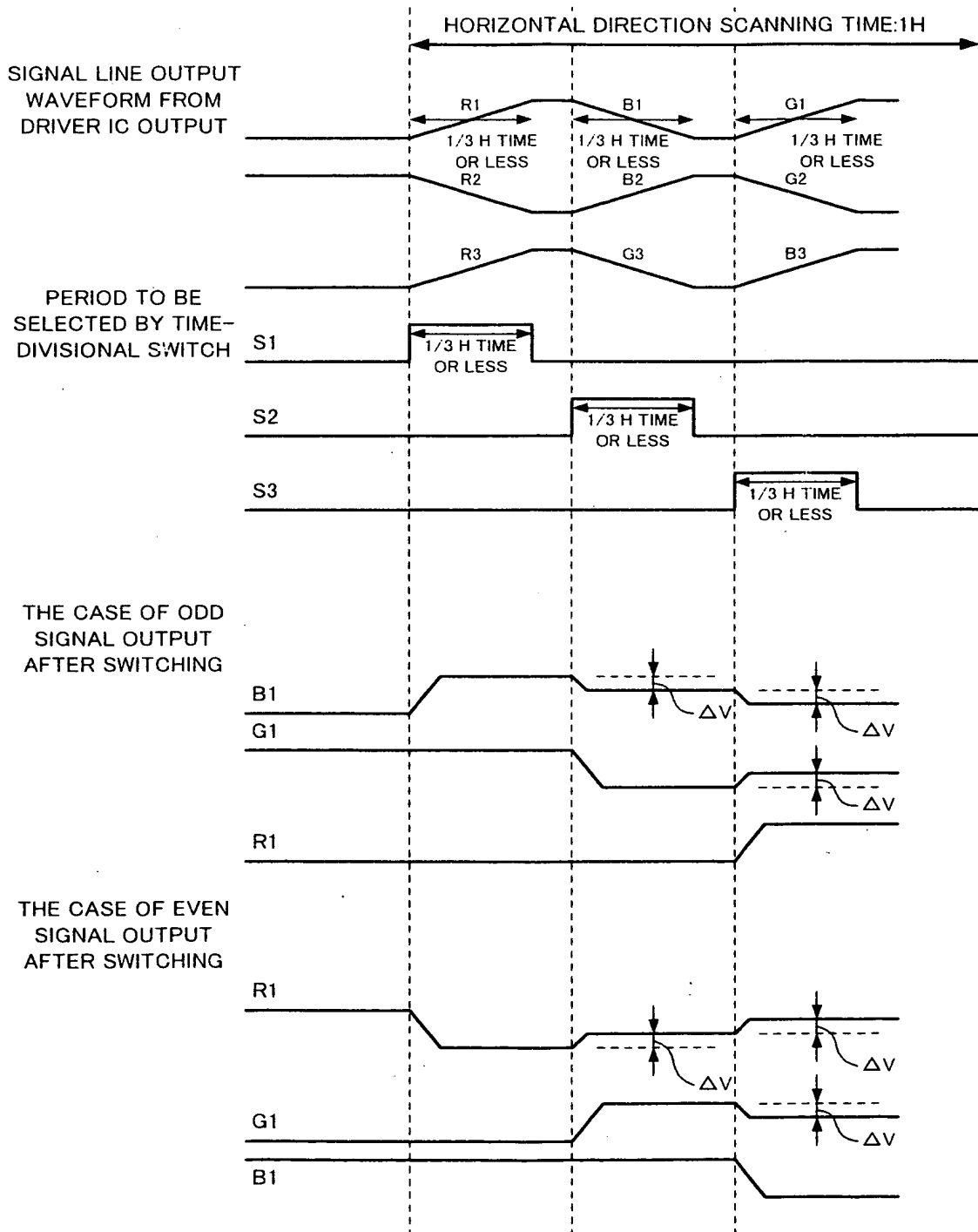
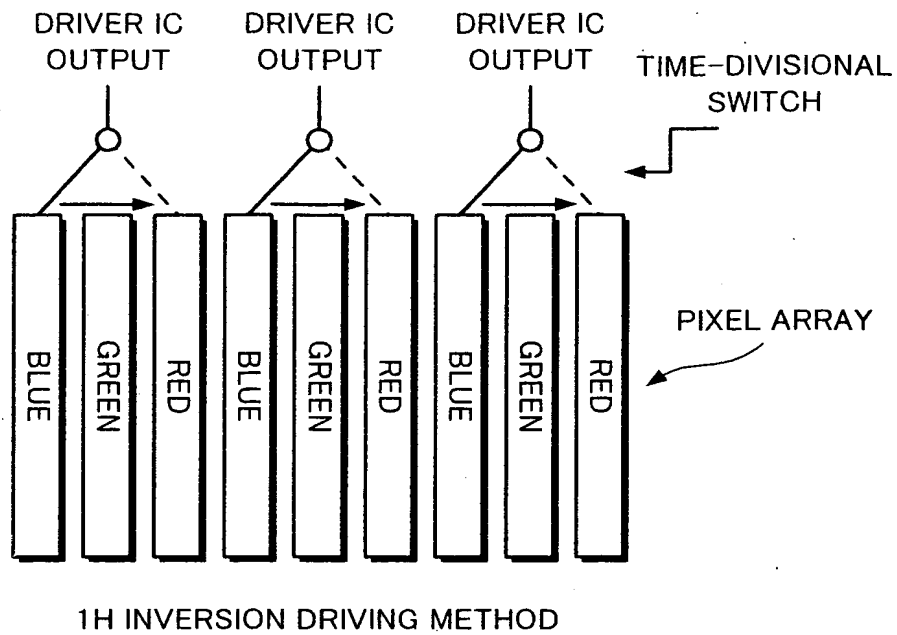
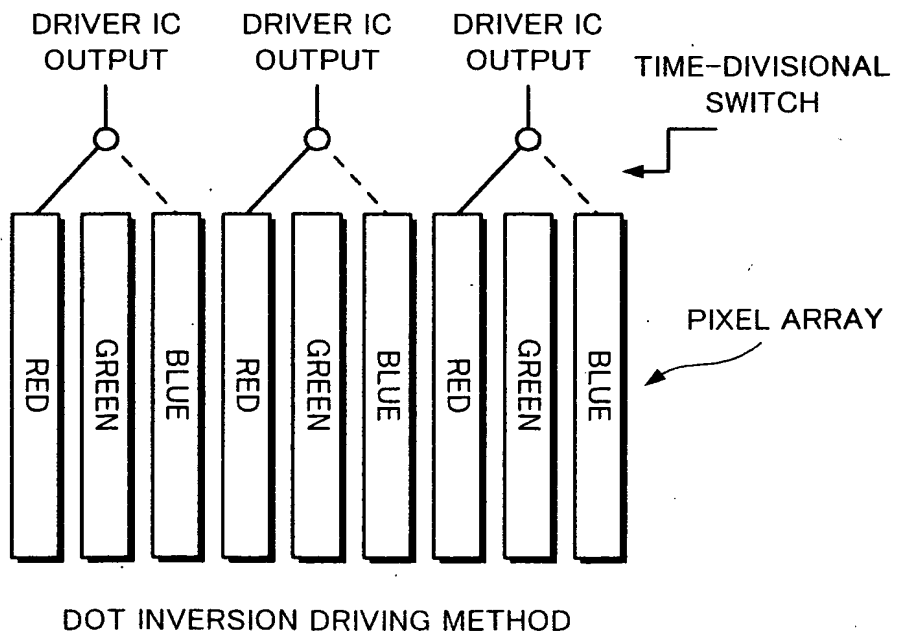


Fig. 37A*Fig. 37B*

- 10, 40.. LIQUID CRYSTAL DISPLAY PANEL
- 11-1 ~ 11-3, 41-1 ~ 41-3.. GATE LINE
- 12-1 ~ 12-6, 42-1 ~ 42-6.. SIGNAL LINE
- 13, 43.. VERTICAL DRIVING CIRCUIT
- 14-1 ~ 14-3, 44-1 ~ 44-5.. DRIVER IC
- 20.. PIXEL
- 21.. THIN FILM TRANSISTOR
- 22.. ADDITIONAL CAPACITOR
- 23.. LIQUID CRYSTAL CAPACITOR
- 31.. HORIZONTAL SHIFT REGISTER
- 32.. SAMPLING SWITCHES
- 33.. LEVEL SHIFTER
- 34.. DATA LATCHES
- 35.. D/A CONVERTER (DIGITAL/ANALOG CONVERTING CIRCUIT)
- 36.. OUTPUT CIRCUIT
- 81, 82.. MEMORY CIRCUIT